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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/170,336	10/13/1998	JOHN STUART BEETESON	UK9-98-026	6676

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IBM CORP  
IP LAW DEPT  
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EXAMINER

NGUYEN, KEVIN M

ART UNIT PAPER NUMBER

2674

28

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/170,336

Applicant(s)

BEETESON ET AL.

Examiner

Kevin M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. In view of the appeal brief filed on 07/07/2004, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Hansen et al (US 5,910,792).

As to claim 1, Hansen et al teach the field emission display FED comprising a cathode means 501 (fig. 5);

row groups 430a, 430b, and 430c (a first plurality of parallel row conductors, fig. 4, col. 4, lines 58-59);

column groups 450a-450d (a second plurality of parallel column conductors, fig. 4, col. 4, line 66);

the operation of the compensating circuit 306 comprises an op-amp 502 which converts the current difference into voltage and sends it to row electrodes 309 via supply voltage signal 412 to make the required correction. At the same time, the voltage output from op-amp 502 is sent to op-amp 503 which inverts the polarity of the voltage and sends it to column electrodes 310 via supply voltage signal 418 to make the required correction (col. 6, lines 19-20).

As to claim 2, Hansen et al teaches that an op-amp 502 is a standard op-amp with high gain and low offset (correction, col. 7, lines 4-13). The output of op-amp 502 is connected to sample cathode 509 and to row electrodes 309 (col. 6, lines 49-50). The values of resistors 505-506 can be selected to generate various gain amounts as desired (col. 6, lines 47-48). The output of op-amp 503 is connected to sample gate 511 and to column electrodes 310 (col. 6, lines 50-51).

As to claim 3, Hansen et al teaches RAM 202 and ROM 203 (see fig. 2, col. 3, lines 57-59).

As to claim 4, Hansen et al teaches a faceplate 302 comprising phosphor layers 304 (fig. 3, col. 4, line 9).

As to claim 5, Hansen et al teaches that an op-amp 502 is a standard op-amp with high gain and low offset (correction, col. 7, lines 4-13). The output of op-amp 502 is connected to sample cathode 509 and to row electrodes 309 (col. 6, lines 49-50).

As to claim 6, Hansen et al teaches a difference between the two currents indicating that there are temperature induced effects causing a degradation in the display performance (e.g., brightness), op-amp 502 converts the current difference into voltage and sends it to row electrodes 309 via supply voltage signal 412 to make the required correction (col. 7, lines 4-9).

As to claim 7, Hansen et al teaches a cross sectional view of structure of FED comprising anode 303 is between row groups (430a, 430b, and 430c), column groups (450a-450d) and a faceplate 302 (a screen, fig. 3, col. 4, lines 27-38).

An op-amp 502 is a standard op-amp with high gain and low offset (correction, col. 7, lines 4-13). The output of op-amp 502 is connected to sample cathode 509 and to row electrodes 309. The output of op-amp 503 is connected to sample gate 511 and to column electrodes 310 (col. 6, lines 49-51).

if there is a difference between the two currents indicating there are temperature induced effects causing a degradation in the display performance (e.g., brightness) (col. 7, lines 4-6).

As to claim 8, Hansen et al teaches the temperature sensitivity of the sample resistor 603 (temperature sensing means, col. 8, lines 23-34).

As to claims 9-11, Hansen et al teaches that an op-amp 502 is a standard op-amp with high gain and low offset (correction, col. 7, lines 4-13). The output of op-amp

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502 is connected to sample cathode 509 and to row electrodes 309. The output of op-amp 503 is connected to sample gate 511 and to column electrodes 310 (col. 6, lines 49-51). The brightness is increased or decreased by controlling the voltage of the row and column drive lines of the FED screen (the physical location of each said first and said second plurality of parallel conductors, col. 3, lines 1-2).

***Response to Arguments***

4. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kevin M. Nguyen** whose telephone number is **703-305-6209**. The examiner can normally be reached on MON-THU from 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reached on **703-305-4709**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

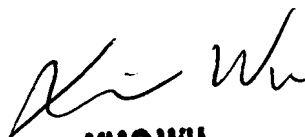
Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Kevin M. Nguyen  
Patent Examiner  
Art Unit 2674

KN  
August 25, 2004

  
**XIAO WU**  
**PRIMARY EXAMINER**